

# DISCIPLINED ENTREPRENEURSHIP: An Alternative to Lean LaunchPad?

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## Abstract

Lean LaunchPad has commanded a strong following among entrepreneurial educators; however, is it the best methodology for new entrepreneurs? MIT's Disciplined Entrepreneurship model offers an interesting alternative with more formal structure and well-defined progression. For those new to entrepreneurship, the added structure can provide welcome guidance through the start-up process. This paper discusses the experiences of Studio G, New Mexico State University's student incubator, in implementing a Lean LaunchPad program model and transitioning to a new curriculum based on Disciplined Entrepreneurship. The paper highlights the advantages and disadvantages of each methodology and the experiences of student entrepreneurs involved in both programs.

## Introduction

Lean LaunchPad has commanded a strong following among entrepreneurial educators and offers a tremendous toolkit for teaching and encouraging entrepreneurship, but is it the best methodology for new entrepreneurs? The purpose of this study is to compare Lean LaunchPad to an alternative methodology, Disciplined Entrepreneurship, and articulate benefits and disadvantages of each approach. The comparison of Lean LaunchPad and Disciplined Entrepreneurship is based on the experience of Studio G, a student incubator that implemented both methodologies over a three-year period.

Studio G is managed by Arrowhead Center, which serves as the economic development arm of New Mexico State University (NMSU). Studio G was founded in 2011 and has grown and evolved substantially since its inception. Currently, Studio G has over 30 active client businesses and works with more than 75 new student entrepreneurs annually. Most Studio G clients are new to entrepreneurship. These clients are undergraduate and graduate-level students from all academic disciplines. Arrowhead Center serves a dual purpose: providing economic development in the region and student learning opportunities on campus. To meet these objectives, Studio G assists students starting businesses with support through external consultants and student employees trained to serve as mentors. In order to ensure quality mentorship, mentors are trained to follow an entrepreneurship curriculum. Evidence-based entrepreneurship was implemented first using Lean LaunchPad principles and the Business Model Canvas (Blank and Dorf 2012; Osterwalder and Pigneur 2010). Lean LaunchPad methodology, with the incorporation of the Business Model Canvas, was taught to all Arrowhead Center mentors and guided the advisement of student entrepreneurs in Studio G. Lean LaunchPad was used for roughly two years, producing an improved entrepreneurial culture and numerous lessons learned.

Studio G recently pivoted and implemented a new entrepreneurship curriculum based on *Disciplined Entrepreneurship: 24 Steps to a Successful Startup* (Aulet 2013) to address some



of the pitfalls identified with evidence-based entrepreneurship. The details of Studio G's experience with these curricula and the advantages and disadvantages of each method are explored in this paper.

## Background

Entrepreneurship curricula were implemented into Studio G programming for two primary reasons:

- To avoid reinventing the wheel by utilizing well-regarded methodologies.
- To provide a consistent advising structure to all clients from all mentors.

Training at Studio G is two-dimensional. Studio G clients need to be trained to be entrepreneurs and guided through the entrepreneurial process. Additionally, student mentors employed by Arrowhead Center to assist Studio G entrepreneurs need to be trained to guide, coach, consult, and advise. These requirements present unique challenges for an entrepreneurship curriculum; however, the outcome has been tremendous learning and experience for all parties involved. The following case studies articulate Studio G's experiences with evidence-based entrepreneurship and Disciplined Entrepreneurship implemented as training curricula for student entrepreneurs and mentors. Data was collected through direct experience, client interviews, and mentor interviews.

## Case Study: Lean LaunchPad Methodology

Evidence-based entrepreneurship is known by many names, most commonly Lean Launch or Lean LaunchPad. The program consists of three parts: The Customer Development model, Business Model Canvas, and Agile Engineering (Blank 2013). Blank (2007) introduced the Customer Development model for launching successful products. The Customer Development model is composed of four steps: Customer Discovery, Customer Validation, Customer Creation,

and Company Building. The Customer Development model is meant to accompany the Product Development process to ensure product development is actually addressing a true customer need. Using the Customer Development model, businesses can significantly increase the likelihood of a successful product launch by iterating product design based on customer feedback.

Blank and Dorf (2012) expand the Customer Development model to startups launching products and services. They draw from Ries (2011), with a focus on testing hypotheses (i.e., unknowns in the business model) to identify a product or service that customers will actually buy, and from Osterwalder and Pigneur (2010) to map the business model.

The Customer Development model describes a process startups can use to find a repeatable and scalable business model. Business models are the mechanisms by which a firm generates profits. These models can most easily be broken down into customer problems and solutions. A customer buying a product or service is generally doing so to solve a problem or inconvenience they cannot solve another way, for less money, or at a price they find reasonable. To create a scalable, repeatable business model, a business must offer a product or service that solves real customer problems in ways not currently available or at a lower cost. Finding a scalable, repeatable business model is the goal of the Customer Development model.

## Implementation

Evidence-based entrepreneurship was first implemented in Studio G in 2012 through the use of the Business Model Canvas and the basic Lean LaunchPad principles of talking to customers and formulating and testing hypotheses. These principles were taught as an alternative to the traditional business planning process used in academic classes at the time. Broader adoption of Lean LaunchPad methodologies did not occur until

2013, when *The Startup Owner's Manual* was widely distributed through Arrowhead Center, making the methodology much more concrete and actionable.

These methodologies were implemented in the Arrowhead Technology Incubator (ATI), Arrowhead Center's incubator serving non-student entrepreneurs. ATI's adoption helped build familiarity with Lean LaunchPad principles throughout the organization. Additionally, faculty members at NMSU began incorporating Lean LaunchPad into courses in the College of Engineering. Arrowhead Center offered design-thinking workshops periodically to teach customer feedback techniques and how to incorporate design thinking into the Business Model Canvas.

### Feedback and Observations

Lean LaunchPad appealed to students by making the entrepreneurial process more accessible through an alternative to traditional business planning. The attractiveness of the new principles helped grow the entrepreneurial culture at NMSU and dramatically increased participation in the Studio G incubator program, particularly from the College of Engineering, the most fervent adopters of Lean LaunchPad. Studio G growth is shown in Tables 1 and 2.

Table 1. New Teams and Student Entrepreneurs in Studio G, 2012-2014

	2012	2013	2014
Team Applications	5	27	36
Student Entrepreneurs	12	49	77

Table 2. Investments, Grants, and Awards Won by Studio G Clients, 2012-2014

	2012	2013	2014
	\$0	\$ 33,201	\$ 468,932

Utilizing the Business Model Canvas as a consulting tool provided a loose structure around meetings with clients. Student mentors were able to quickly grasp the concepts of formulating hypotheses and testing the key assumptions. Generally, consultations with student entrepreneurs revolved around the Business Model Canvas. Brainstorming sessions were held to fill out the canvas initially and follow-up meetings worked through the key assumptions of the business model. Strategic decisions were prioritized around testing the key assumptions. Two problems arose from this approach:

1. Clients and mentors lacked a broader vision. They knew their next steps, but not where they were going in a "big picture" sense.
2. Brainstorming using a Business Model Canvas clouded focus and produced "laundry lists" that felt like "homework" to the clients.

Focusing on customer feedback as the chief tool for validation lost sight of the purpose or broader "why" for many clients. This problem is most likely inherent to employing inexperienced mentors to provide advice; however, it highlights a weakness of the customer development model when utilized by inexperienced entrepreneurs. For example, it was difficult to formulate mission and vision statements when clients were waiting for customers to identify what their mission and vision should be. Frequent pivots often upended the original purpose of startup team members. In the absence of a mission and vision, clients and mentors lacked a direction and had trouble organizing a startup team. Chiefly due to inexperience, the client teams became amorphous groups seeking a purpose, a mission, and a vision on the path to finding a scalable business model.

The most successful clients in Studio G came in with an idea, built that idea, and

sold it – undeterred by major pivots. Lean LaunchPad principles helped with iterations and guided development for these focused teams, while the unfocused teams wandering the Customer Discovery path floundered and gradually became overwhelmed with overbearing Business Model Canvas “to-do” lists. These dense Business Model Canvases were the result of brainstorming sessions that lacked a narrowing or focusing component. While armed with tools of evidence-based entrepreneurship, clients and mentors were not trained to choose specific directions; these decisions were primarily left to customer interviews. This uncertainty may be handled comfortably by an experienced entrepreneur who knows which decisions to make on their own (most) and which to relegate to customer feedback (few). Inexperienced entrepreneurs were overwhelmed by the uncertainty and mentors were not given the tools to bring things back on track. As it was implemented, the Lean LaunchPad program was letting too many promising clients fall through the cracks. Studio G looked to alternative approaches.

Stoppaps were implemented to address some of these problems. Initial consultations with clients were held with more experienced mentors who could illuminate the path of where the hypotheses testing was leading and help them flesh out a vision. These sessions helped clarify long-range visions to help justify short-term obstacles that needed to be overcome. Additional tools such as critical path thinking were taught to help prioritize the entrepreneur’s focus toward value-added activities. Still, given the long to-do lists generated using the Business Model Canvas as a brainstorming tool, clients seemed to prioritize tasks by ease of execution rather than value added.

#### **Advantages of Evidence-based Entrepreneurship**

- Made entrepreneurship more appealing and accessible.
- Improved culture of entrepreneurship

through ease of access.

#### **Disadvantages of Evidence-based Entrepreneurship**

- Failed to provide sound methodology for focusing client activities.
- Lack of focus/direction eventually overwhelmed clients.
- Not enough guidance for new entrepreneurs to manage uncertainty inherent in entrepreneurship.

#### **Case Study: Disciplined Entrepreneurship**

Bill Aulet teaches entrepreneurship at Massachusetts Institute of Technology and developed Disciplined Entrepreneurship as a 24-step process for successfully starting innovation-driven enterprises. Disciplined Entrepreneurship meshes well with the Lean Startup methodology, covering six basic themes:

1. Who is your customer?
2. What can you do for your customer?
3. How does your customer acquire your product?
4. How do you make money off your product?
5. How do you design and build your product?
6. How do you scale your business?

Underlying these six themes are 24 steps that walk through the validation and development of a business. Disciplined Entrepreneurship builds on evidence-based entrepreneurship, Lean LaunchPad, and also draws a heavy influence from Geoffrey Moore’s *Crossing the Chasm* and other well-known entrepreneurship books. Table 3 below provides an overview of Disciplined Entrepreneurship’s steps.

Table 3. Steps of Disciplined Entrepreneurship

THE 24 STEPS OF DISCIPLINED ENTREPRENEURSHIP					
1. Market segmentation	7. High-level product specification	13. Map the process to acquire a paying customer	19. Calculate the cost of customer acquisition (COCA)		
2. Selecting a beachhead market (BHM)	8. Quantify the proposition	14. Follow-on TAM	20. Identify key assumptions		
3. End user profile	9. Identify next ten customers	15. Design business model	21. Test key assumptions		
4. Total addressable market (TAM) for BHM	10. Define your core	16. Pricing framework	22. Define minimum viable product (MVP)		
5. Persona for BHM	11. Chart your competitive position	17. Calculate the lifetime value of an acquired customer (LTV)	23. Show the dogs will eat the dog food		
6. Full life cycle use case	12. Determine the decision-making unit (DMU)	18. Map the sales process	24. Develop a product plan		

### Implementation

Disciplined Entrepreneurship was implemented as a solution to challenges using evidence-based entrepreneurship faced by Studio G. Lean LaunchPad had taken hold within the NMSU community and was popular for its apparent ease and accessibility. However, results in Studio G left room for improvement in terms of new entrepreneur development and follow through.

Disciplined Entrepreneurship was adopted as a consulting methodology in June 2014 and offered as client curriculum by August 2014. The initial implementation involved a deep dive into the Disciplined Entrepreneurship book by all student mentors. Eight student mentors were each asked to develop presentations for three of the curriculum's 24 steps. Presentations were given in a two-hour block to peer and client audiences.

The majority of Studio G clients surveyed responded they were interested in participating in our Disciplined Entrepreneurship pilot program. Respondents were guided through the initial steps of Disciplined Entrepreneurship and its principles. One-page modules were developed for each of the 24 steps to help clients navigate the process. A Disciplined Entrepreneurship Series was started in the fall semester to continue

the training process at weekly networking hours for clients and staff.

### Feedback and Observations

The initial response to Disciplined Entrepreneurship was positive, because it provided more guidance than the previous evidence-based entrepreneurship curriculum. Additionally, Disciplined Entrepreneurship excelled as a standalone teaching tool, whereas Lean LaunchPad required substantial direct mentorship to teach lessons because it is less structured. The implementation of Disciplined Entrepreneurship was an improvement because it could be taught in modular presentations about the curriculum's steps. Disciplined Entrepreneurship's origination from MIT also enhanced its appeal. In short, clients and mentors were eager for additional guidance after following Lean LaunchPad principles.

Immediate benefits were realized in the first three steps of the program, which articulate the beachhead market concept and the importance of focus. While the book is written in steps, each step contains important and valuable principles that help develop new entrepreneurs. In contrast to Lean LaunchPad, which encourages brainstorming and customer feedback, Disciplined

Entrepreneurship emphasizes focus and establishes concrete ideas. Specific practices for isolating the key components of customer feedback are explained to help filter customer interactions into meaningful product criteria.

By following the steps one at a time, clients became less overwhelmed with the process and found it easier to digest. Mentorship also improved as a result of incorporating the Disciplined Entrepreneurship principles. The general attitude of consultations changed from brainstorming and ideation to focusing on the key steps to create value and build the business.

Clients found that business decisions became easier as they made more choices and eliminated uncertainty. As a result, the entrepreneurship process became more manageable and accurate. The 24 steps indicated the volume of work required to build businesses; entrepreneurs seemed more willing to tolerate the challenges. Lean LaunchPad had promised an easier endeavor than what the entrepreneurs observed and they rebelled and disbanded when these promises did not prove out.

All aspects of Disciplined Entrepreneurship were not perfect, but that is to be expected. We found that clients read the book and attended presentations about the curriculum but struggled to formally make it through all the steps in the curriculum. One drawback to the book is that implementation is difficult at the program level because a brief tracking tool like the Business Model Canvas is not available. For this reason, Studio G developed 1-page modules based on the 24 steps to provide a brief summary and worksheet to catalogue insights found and decisions made at each step. Despite these drawbacks, after working through only the initial steps of Disciplined Entrepreneurship, clients had much better direction and purpose than experienced using Lean LaunchPad. Clients were able to mitigate uncertainty and progress more quickly

because focus had been achieved.

### **Advantages of Disciplined Entrepreneurship**

- Focus was emphasized as a key principle and encouraged from the beginning of the process.
- Each step provided concrete and valuable principles that offered sound guidance to mentors and entrepreneurs.
- Adaptable and applicable to a wide variety of businesses; not limited to software or technology.

### **Disadvantages of Disciplined Entrepreneurship**

- Formal curriculum progress is difficult because there is no Business Model Canvas tool for Disciplined Entrepreneurship. Worksheets had to be developed for each step to guide formal progress.

### **Conclusion**

Evidence-based entrepreneurship, Lean LaunchPad, and the Business Model Canvas are great tools for encouraging entrepreneurship and serving as an entry point for students to get involved with entrepreneurship. As a standalone curriculum without prior experience or experienced mentors, however, new entrepreneurs will struggle with Lean LaunchPad due to lack of focus and direction. Lean LaunchPad also makes entrepreneurship appear easier than it actually is. This is part of its appeal, but also leads to challenges when entrepreneurs get involved in a venture that is inevitably more complicated than anticipated. Guidance for overcoming these challenges is not found in the basic principles of Lean LaunchPad.

Disciplined Entrepreneurship's emphasis on focus and reducing ideas to concrete actions overcomes many of these challenges for new entrepreneurs. In the experience of Studio G, student entrepreneurs have responded well to the structure and principles of Disciplined Entrepreneurship. Coupled with the Lean LaunchPad principles of validating hypotheses quickly, the two curricula are valuable

resources for entrepreneurs, incubators, and mentors.

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